

## METHODS OF MANUFACTURING A STRETCHED MECHANICAL FASTENING WEB LAMINATE

### Abstract of the Disclosure

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The present invention relates to a method of manufacturing a stretched mechanical fastening web laminate (1) comprising a thermoplastic web layer (13) having two major surfaces, one of the major surfaces bearing a multitude of male fastening elements (14) suitable for engagement with a corresponding female fastening material, and on its other major surface a fibrous web layer (11), said

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method comprising the steps of

- (i) providing the fibrous web layer (11) having an initial basis weight,
- (ii) passing the fibrous web layer (11) through a nip formed by two rolls (101), (103), one of them having cavities (120) that are the negatives of a plurality of male fastening elements (14) , introducing a molten thermoplastic resin into the cavities (120) in excess of an amount that would fill the cavities (120) which excess forms the thermoplastic web layer (13), allowing the resin to at least partially solidify and stripping of a precursor web laminate (10) thus formed comprising the fibrous web layer (11) and the thermoplastic web layer (13) bearing a plurality of male fastening elements (14), from the cylindrical roll (103) having cavities (120) whereby the thermoplastic web layer (13) has an initial thickness and an initial hook density, and

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- (iii) stretching the precursor web laminate (10) monoaxially or biaxially thereby decreasing the basis weight of the fibrous web layer (11) and the thickness of the thermoplastic web layer (13) from their respective initial values to provide a stretched mechanical fastening laminate (1) having a basis weight of less than  $100 \text{ g m}^{-2}$ .

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